



PTT Global Chemical Public Company Limited

Management Discussion and Analysis Q1/2024

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1. Executive Summary

In Q1/2024, PTT Global Chemical Public Company Limited (“the Company”) had total sales revenue of Baht 155,187 million, decreased by 4% from Q4/2023, primarily due to a drop in refinery product prices and a decline in refinery sales volume, particularly in diesel products, following the seasonal slowdown after the winter. Sales revenue increased by 5% when compared to the same period last year, driven by increased prices of refinery, phenol, and polymer products.

In Q1/2024, the Company had Adjusted EBITDA of Baht 11,054 million in this quarter, decreased by 2% from Q4/2023. Adjusted EBITDA during Q4/2023 included a gain of Baht 1,422 million from bond buybacks. Therefore, when considering operations alone, it displayed improved performance, primarily driven by the Aromatics and Olefins businesses. Moreover, allnex experienced a sales increase. Refinery business continued to maintain high level of product spread, but it declined from the previous quarter due to decreased diesel demand following the end of winter season and oil price fluctuations during Q1/2024. This was also impacted by escalating uncertainty amid ongoing conflicts in the Middle East. As a result, the GRM was 8.3 USD/barrel in Q1/2024. The Company started producing diesel in compliance with the Ministry of Energy's policy, adhering to the EURO 5 emission standards, which came into effect on January 1, 2024. The Aromatics business experienced an upturn, driven by the improved product spreads of Paraxylene and Benzene. After the completion of planned maintenance shutdowns in Q4/2023, sales volumes in both the Olefins and Polymers businesses increased, resulting in a 3% increase in sales volume of Polymers & Chemicals products. Moreover, Polyethylene (PE) prices showed signs of rebounding. The Performance Chemicals business has significantly improved, especially evident in the increased sale volumes from allnex, marking a recovery from the slowdown experienced during the holidays period in Q4. The overall petrochemical market remained weak, facing pressure from the ongoing economic recovery, and the addition of recent petrochemical capacity from China.

The Company had a Net Operating Profit¹ at Baht 703 million in Q1/2024, marking an increase from the previous quarter when the Company incurred Net Operating Loss of Baht 1,949 million. The Company recorded extraordinary/uncontrollable items from Stock Gain Net NRV of Baht 359 million, gain from commodity hedging of Baht 107 million, net loss from foreign exchange loss and financial derivatives loss of Baht 1,577 million. The Company had a Share of Loss from Investments of Baht 323 million, as the performance of the petrochemical joint venture companies is not recovered. The Company reported Net Loss in Q1/2024 of Baht 606 million (Baht -0.13/share)

¹ Net Operating Profit/Loss excludes stock gain/loss net NRV, gain/loss from foreign exchange and financial derivative, gain/loss from commodity hedging, and extraordinary items

Table 1 : Performance Summary

(Unit: Million Baht)	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Sales Revenue	147,248	162,264	155,187	5%	-4%
EBITDA	9,115	12,585	11,429	25%	-9%
EBITDA Margin (%)	6%	8%	7%	1%	-1%
Share of profit /(loss) of investments in JV and Associates	(152)	11	(323)	-113%	<-200%
Net Profit/(Loss)	82	5,081	(606)	<-200%	-112%
EPS (Baht/Share)	0.02	1.13	(0.13)	<-200%	-112%
Adjusted EBITDA ¹	9,530	11,335	11,054	16%	-2%
Adjusted EBITDA Margin (%)	6%	7%	7%	1%	0%

Note: 1) Adjusted EBITDA refers to EBITDA excluding Stock gain/(loss),NRV, Gain/(loss) from commodity hedging, and Extra item.

In Q1/2024, Upstream business performance has significantly improved compared to the previous quarter, supported by Aromatics performance, which was influenced by higher product spreads of paraxylene and benzene due to tightened supply. Olefins performance improved due to higher sales volumes, driven by increased product spreads of ethylene, and a shorter period of planned maintenance shutdown compared to the previous quarter. Refinery performance experienced a slight decline, with the GRM at 8.3 USD/barrel. This was in line with the decrease in Diesel selling prices due to demand slowing down after the winter.

Intermediates business performance slightly increased compared to the prior quarter, driven by an increase in Monoethylene Glycol (MEG) spread. This rise was attributed to tightened supply dynamics, as the export portion from the Middle East to China decreased. However, the Phenol business displayed a drop in sales volume due to a planned maintenance shutdown lasting 39 days. Additionally, the decrease in both Phenol and Bisphenol A (BPA) product spreads resulted from an increase in raw material prices. The prices of both Phenol and Bisphenol A (BPA) remain impacted by factors in the downstream industry, such as new capacity additions in China. Despite this, there was an increase in sales following the completion of the planned maintenance shutdown in Q4/2023.

Polymers & Chemicals business performance increased from the previous quarter due to the rise in average plastic spread prices, in line with the increase in Naphtha prices. During this period, supply in the Middle East continues to be under pressure amid the Red Sea conflict. The ongoing conflict in the Red Sea has driven the overall plastic resins price. In addition, there was a boost in the sales volume of Polymers & Chemicals products upon the completion of the planned maintenance shutdown at the Polyethylene (PE) plant in Q4/2023.

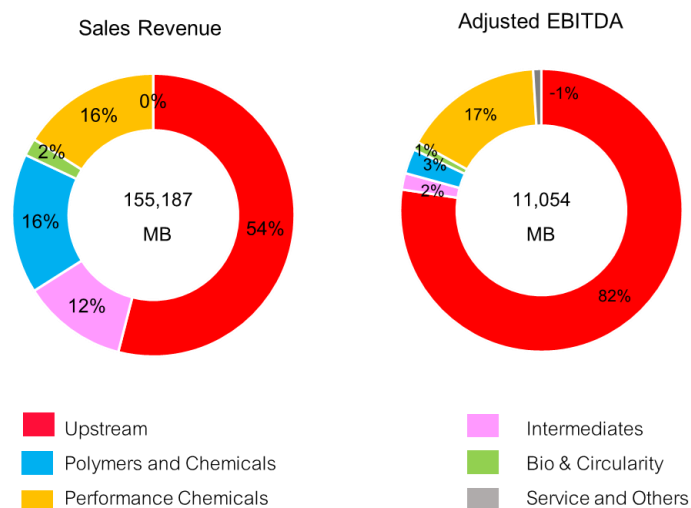
Bio & Circularity Business performance slightly decreased compared to the previous quarter, primarily due to the decrease in Fatty Alcohol (FA) product spread was driven by declining demand from cosmetic and hygiene product manufacturers. While the Performance Chemicals Business displayed a slight improvement, it was driven by a 10% increase in allnex sales volume across the Asia and Europe regions compared to the previous quarter, which coincided with a holiday period.

Table 2 : Adjusted EBITDA by Business Unit

Adjusted EBITDA ¹ Margin by Business Unit	Q1/2023	Q4/2023	Q1/2024	YoY	QoQ
				% +/-	% +/-
Adjusted EBITDA (Million Baht)					
Upstream	6,632	6,547	9,047	36%	38%
Intermediates	(978)	192	207	121%	8%
Polymers & Chemicals	1,704	1,181	279	-84%	-76%
Bio & Circularity	269	185	92	-66%	-50%
Performance Chemicals	1,660	1,783	1,865	12%	5%
Service and Others	243	1,447	(437)	<-200%	-130%
Total	9,530	11,335	11,054	16%	-2%
Adjusted EBITDA margin (%)					
Upstream	8	7	11	3	4
Intermediates	(6)	1	1	7	0
Polymers & Chemicals	8	5	1	(7)	(4)
Bio & Circularity	7	5	2	(5)	(3)
Performance Chemicals	7	8	8	1	(0)
Average	6	7	7	1	0

Note 1) Adjusted EBITDA refers to EBITDA excluding Stock gain/(loss), NRV, Gain/(loss) from commodity hedging, and Extra item.

Q1/2024



2. Performance Analysis by Business Unit

2.1 Upstream

Table 3: Price, Product Spreads and performance of Upstream

	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Dubai Crude Oil (\$/bbl)	80.3	83.6	81.3	1%	-3%
Diesel 500 ppm-Dubai (\$/bbl) ¹	25.2	21.1	21.7	-14%	3%
Diesel 10 ppm-Dubai (\$/bbl) ²	28.6	24.4	23.1	-19%	-5%
LSFO-Dubai (\$/bbl)	12.3	14.1	13.5	10%	-4%
Gasoline-Dubai (\$/bbl)	18.6	12.5	17.9	-4%	43%
Jet-Dubai (\$/bbl)	26.5	23.6	21.1	-20%	-11%
Market GRM (\$/bbl)	10.3	9.0	8.3	-19%	-7%
Condensate (\$/ton)	678	687	677	0%	-1%
Paraxylene (FECF)-Condensate (\$/ton)	355	330	350	-1%	6%
Benzene-Condensate (\$/ton)	252	201	323	28%	61%
BTX P2F (\$/ton)³	321	253	311	-3%	23%
Naphtha (MOPJ) (\$/ton)	689	659	686	0%	4%
Ethylene (SEA) (\$/ton)	923	937	974	5%	4%
Propylene (SEA) (\$/ton)	959	807	919	-4%	14%
Hedging Gain/(Loss) (MB)	943	831	107	-89%	-87%
Stock Gain/(Loss) and NRV (MB)	(1,505)	(2,592)	273	118%	111%
Adjusted EBITDA⁴ (MB)	6,632	6,547	9,047	36%	38%
Adjusted EBITDA (%)	8%	7%	11%	2%	4%
Petroleum Product Sales Volume (million bbl)	14.9	18.1	14.8	-1%	-18%
Petrochemical Product Sales Volume (million ton)	1.2	1.3	1.3	5%	0%

Note: 1) Diesel 500 ppm market price is based on EURO4 standard

2) Diesel 10 ppm market price is based on EURO5 standard stipulated since January 1, 2024

3) There was a reclassification of natural gas expenses, which are fuel costs in the refinery business segment and the aromatics business segment, from feedstock costs to variable costs. This led to a retrospective adjustment of BTX P2F for comparative analysis purposes, but it did not affect the Market GRM and Adjusted EBITDA as reported by the company.

4) Adjusted EBITDA refers to EBITDA excluding Stock gain/(loss), NRV, Gain/(loss) from commodity hedging, and Extra item

In Q1/2024, Upstream business had Adjusted EBITDA of Baht 9,047 million, increased by 38% from the previous quarter, and Adjusted EBITDA Margin of 11%. Petroleum product sales volume was 14.8 million barrels, and the Petrochemical product sales volume was 1.3 million tons. The factors supported decrease in the performance are as follows:

1. Refinery performance decreased from the previous quarter. In Q1/2024, crude oil price increased during this quarter, even though the average crude oil price decreased from the previous quarter. This was pressured by the economic recession in many countries, especially China and the high production level in America, Brazil, and Canada, despite cut run by the Middle East and Russia that led to Petroleum

product spreads were pressured by the economic recession as mentioned and market supply remained sufficient. Diesel selling prices which is the main products decreased due to more supply in the region from India and the Middle East with sluggish demand post-winter. Low Sulfur Fuel Oil spread decreased as higher supply due to higher production and import from Kuwait. Gasoline spreads increased due to Chinese New Year in China and Ramadan in Indonesia and Malaysia which led to increased demand. The Company's Market GRM decreased to 8.3 USD/barrel. The increase in crude oil price during the quarter resulted to the Company recording a slight stock gain in this period.

2. Aromatics performance increased from the previous quarter. Paraxylene over condensate spread increased caused by several plants on planned maintenance turnaround and alternative feedstock reformat to gasoline blending although downstream market was weak, especially lower demand of the polyester and textile market. Benzene over condensate spread increased due to several plants on planned maintenance turnaround and low inventory with recovery in downstream demand after Chinese New Year. These factors resulted to an increase in Market P2F of this quarter to 311 USD/ ton.
3. Olefins performance slightly increased from the previous quarter. Olefins product spread increased due to ethylene price increased as tight supply from Asian crackers during Red Sea conflict. In this quarter, there was the planned maintenance shutdown of Olefins plant 2/2 in 56 days, while there was planned maintenance shutdown of Olefins plant 1 in Q4/2023.

2.2 Intermediates

Table 4: Price, Product Spreads and and performance of Intermediates

(Unit : USD per ton)	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Mono-ethylene glycol (MEG -ACP)	860	840	865	1%	3%
MEG - 0.65 Ethylene	260	231	232	-11%	0%
Phenol	1,017	952	948	-7%	0%
Phenol spread*	174	293	168	-3%	-43%
Bisphenol A (BPA)	1,299	1,279	1,265	-3%	-1%
BPA spread**	242	243	219	-9%	-10%
Propylene Oxide (PO)	1,150	946	1,013	-12%	7%
Purified Terephthalic Acid (PTA)	775	753	768	-1%	2%
PTA - 0.67PX	82	72	80	-3%	12%
Acrylonitrile (AN)	1,504	1,235	1,252	-17%	1%
AN - Propylene	544	428	332	-39%	-22%
Methyl Methacrylate (MMA)	1,530	1,561	1,718	12%	10%
MMA - Naphtha	841	902	1,032	23%	14%
Adjusted EBITDA (MB)	(978)	192	207	121%	8%
Adjusted EBITDA (%)	-6%	1%	1%	7%	0%
Sales Volume (Kton)	612	676	695	14%	3%
Share of gain/(loss) from investment (MB)	(309)	(272)	(143)	54%	47%

Note : *Phenol spread derives from Phenol-0.878 BZ-0.474Propylene+0.616 Acetone ** BPA spread derives from BPA-0.853 Phenol-0.273 Acetone

In Q1/2024, Intermediates business had Adjusted EBITDA of Baht 207 million, increased by 8% from the previous quarter, and Adjusted EBITDA Margin of 1%. Overall sales volume was approximately 695 thousand tons, increased by 3% compared with the previous quarter mainly due to increased in Phenol sales volume as the planned maintenance shutdown of Phenol 2 plant for 27 days, BPA plant for 22 days in Q4/2024 and Mono-ethylene glycol plant for 39 days in Q1/2024.

In this quarter, the performance decreased from the previous quarter resulting from a decline in Phenol product spread as a higher Benzene price, while phenol remain oversupplied with weak demand in the construction industry. For Mono-ethylene glycol business, the rise in this business is due to tightened supply dynamics, as the export portion from the Middle East to China decreased. However, the Intermediates business remained pressured by the recession and expansion of production supply in China, impacting the downstream industries of Phenol, BPA, and PTA, specifically the textile industry (filament and staple fiber). Lower purchase orders and production by downstream before the Chinese New Year, as well as weaker-than-expected recovery in the construction and Electrical and Electronics (E&E) industries in China, have contributed to the overall slow pace of recovery in this quarter.

2.3 Polymers & Chemicals

Table 5: Price, Product Spreads and and performance of Polymers & Chemicals

(Unit : USD per ton)	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Average Polyethylene(PE)	1,096	1,001	1,052	-4%	5%
High-Density Polyethylene (HDPE)	1,085	1,023	1,041	-4%	2%
HDPE-Ethylene	162	86	67	-59%	-22%
Linear Low-Density Polyethylene (LLDPE)	1,074	975	1,029	-4%	6%
LLDPE-Ethylene	151	38	55	-63%	44%
Low-Density Polyethylen (LDPE)	1,130	1,005	1,085	-4%	8%
LDPE-Ethylene	207	69	111	-46%	62%
Polyethylene Terephthalate (PET)	971	880	913	-6%	4%
Polypropylene (PP)	1,096	968	1,044	-5%	8%
PP- Naphtha	407	309	358	-12%	16%
Polyvinyl chloride (PVC)	885	760	763	-14%	0%
PVC-0.5Ethylene	423	291	276	-35%	-5%
Polyols	1,430	1,258	1,278	-11%	2%
Polyols-0.92PO	372	388	346	-7%	-11%
Adjusted EBITDA (MB)	1,704	1,181	279	-84%	-76%
Adjusted EBITDA (%)	8%	5%	1%	-7%	-4%
Sales Volume (Kton)	535	590	612	15%	4%
Share of gain/(loss) from investment (MB)	(164)	(202)	(87)	47%	57%

In Q1/2024, Polymers and Chemicals Business had Adjusted EBITDA of Baht 279 million, which decreased by 76 % from the previous quarter, resulting in Adjusted EBITDA Margin of 1%. This was mainly driven by the lower spread between Polyethylene and Ethylene. Overall, the total sales volume of Polymers and Chemicals Products was approximately 612 thousand tons, which increased by 4% compared to the previous quarter, mainly due to scheduled maintenance shutdown at the Polymer plants during Q4/2023. In term of supply, there was some shortage in the first

quarter from manufacturers in the East Asia amid the conflict in the Red Sea. This contributed positively to overall Polyethylene prices in Q1/2024. While the demand of end-market continued to be sluggish, from the Chinese New Year and Ramadan holidays. In addition, the market still faces pressure from the new supply entering in Vietnam in the latter half of 2024.

2.4 Bio & Circularity

Table 6: Price, Product Spreads and and performance of Bio & Circularity

(Unit : USD per ton)	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Methyl Ester (ME) P2F (THB per Kilogram)	4.3	4.3	4.3	0%	0%
Fatty Alcohol (FA) P2F	543	394	343	-37%	-13%
Adjusted EBITDA (MB)	269	185	92	-66%	-50%
Adjusted EBITDA (%)	7%	5%	2%	-4%	-3%
ME Sales Volume (Kton)	86	73	79	-8%	9%
FA Sales Volume (Kton)	22	29	25	15%	-14%
Share of gain/(loss) from investment (MB)	127	(71)	(418)	<-200%	<-200%

In Q1/2024, Bio and Circularity business had Adjusted EBITDA of Baht 92 million, decreased by 50% from the previous quarter, and Adjusted EBITDA Margin of 2% resulting from Fatty Alcohol (FA) P2F slightly decreased due to the post-high Season for cosmetics and health product manufacturers in Q4/2023. However, the conflict in the Red Sea contributed to fluctuations in the Crude Palm Kernel Oil (CPKO) price and some buyers stockpiled Crude Palm Kernel Oil (CPKO) due to logistical concerns. Increased demand for Methyl Ester (ME) is continually driven by tourism and energy policies, such as maintaining the high-speed diesel price at not more than 30 Baht/Litre, while ME prices increased aligned with rising crude palm oil (CPO) prices compared to Q4/2023.

2.5 Performance Chemicals

Table 7: Performance of Performance Chemicals

	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Adjusted EBITDA (MB)	1,660	1,783	1,865	12%	5%
Adjusted EBITDA (%)	7%	8%	8%	1%	0%
Sales Volume (Kton)	199	188	206	3%	9%
Share of gain/(loss) from investment (MB)	(40)	(75)	178	>200%	>200%

For Performance Chemicals Business in Q1/2024, the Adjusted EBITDA was Baht 1,865 million, which increased from the previous quarter by 5%, and the Adjusted EBITDA Margin was at 8% mainly due to the increase in sales volume of allnex by 10% from the previous quarter. This is because in the previous quarter, customer demand dropped due to the holiday period in December, and sales volumes in Europe and Asia-Pacific regions improved. Furthermore, EMEA volumes were positively impacted by the supply chain disruption due to the Red Sea conflict. In addition, allnex continues to maintain its expense control and profit margin per unit, resulting in the increase in overall Adjusted EBITDA. Meanwhile, the performance of Vencorex, a manufacturer of HDI derivatives products, continues to be impacted by slow demand during the economic downturn and fierce competition from Chinese producers.

3. Operating Performance

Unit : MB		Q1/2023 ¹	Q4/2023 ¹	Q1/2024	YoY % + /(-)	QoQ % + /(-)
1	Sales Revenue	147,248	162,264	155,187	5%	-4%
2	Feedstock cost	(110,578)	(126,544)	(117,919)	-7%	7%
3	Product to Feed Margin	36,670	35,720	37,268	2%	4%
4	Variable Cost	(14,292)	(12,506)	(12,409)	13%	1%
5	Fixed OH	(7,668)	(9,654)	(8,335)	-9%	14%
6	Stock Gain/(Loss) and NRV	(1,359)	(2,413)	359	126%	115%
7	Gain/(Loss) on Commodity Hedging	943	831	107	-89%	-87%
8	Other Revenue	1,383	7,841	1,404	2%	-82%
9	SG&A Expenses	(6,562)	(7,234)	(6,965)	-6%	4%
10	EBITDA	9,115	12,585	11,429	25%	-9%
11	Depreciation & Amortization	(6,960)	(6,533)	(7,280)	-5%	-11%
12	Extra items	-	547	-	0%	-100%
13	EBIT	2,155	6,599	4,149	93%	-37%
14	Net financial expense	(2,683)	(2,683)	(2,554)	5%	5%
15	FX Gain(Loss)	696	2,288	(1,577)	<-200%	-169%
16	Share of gain/(loss) from investment	(152)	11	(323)	-113%	<-200%
17	Corporate Income Tax	43	(1,199)	(291)	<-200%	76%
18	Net Profit/(Loss) after Tax	59	5,016	(596)	<-200%	-112%
	Profit/(loss) attributable to:					
19	Non-controlling interests	(23)	(65)	10	143%	115%
20	Owners of the Company	82	5,081	(606)	<-200%	-112%
21	Adjusted EBITDA ²	9,530	11,335	11,054	16%	-2%

Note:

- 1) In Q1/2024, there was a reclassification of natural gas expenses, which are fuel costs in the refinery business segment and the aromatics business segment, from feedstock costs to variable costs. This led to a retrospective adjustment of the aforementioned items for comparative analysis purposes, without impacting other items and net profit as reported by the company.
- 2) Adjusted EBITDA refers to EBITDA excluding Stock gain/(loss), NRV, Gain/(loss) from commodity hedging, and Extra item.

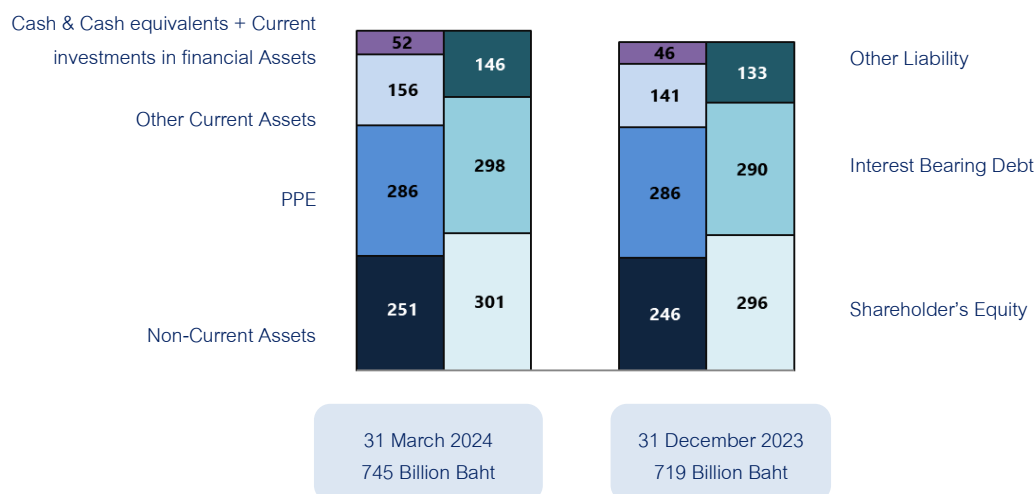
- In Q1/2024, the Company reported sales revenue of Baht 155,187 million, which decreased by 4% from the previous quarter. This was primarily attributed to a decrease in sales volumes from Refinery, mainly from less demand for diesel products following a seasonal slowdown after winter. However, the sales revenue in Q1/2024 increased by 5% from Q1/2023. This increase was mainly attributed to the increase in the average petroleum prices, Phenol and Polymers prices.

- Variable Costs in Q1/2024 decreased by 1% from the previous quarter, mainly due to the drop in natural gas price.
- Fixed overhead and SG&A expenses in Q1/2024 decreased by 9% from last quarter. The primary reason for the decrease was restructuring expenses incurred in the last quarter.
- Other Income decreased from last quarter since in Q4/2023, there was the gain on sales of GCL's shares (including a gain from change in ownership interest in subsidiary to joint venture at fair value) at Baht 4,017 million and a gain from the repurchase of USD bonds amounting to Baht 1,422 million.
- Depreciation and Amortization in Q1/2024 increased from the previous quarter by 11%, mainly from sales and lease-back of some plant assets in the previous quarter.
- Financial expenses decreased from the previous quarter as the Company repurchased USD bonds in end of last year. Additionally, interest income from banks increased due to higher average balance in cash and short-term investments.
- The Company had foreign exchange loss in Q1/2024 of Baht 1,577 million due to the depreciation in Baht currency against the US dollar compared with Q4/2023.
- The Company recorded share of loss from investments amounting to Baht 323 million, decreased from the previous quarter. This was due to GCL's income from insurance claims related to the warehouse incident, recorded in the previous quarter. However, the operational performance of the joint venture companies remained subdued during the economic downturn, which impacted the decline in the product spread.

4. Statements of Financial Position

4.1 Balance sheet

Unit: Billion Baht



Assets

As of March 31, 2024, the Company had total assets of Baht 745,048 million, increased by Baht 26,043 million or 4% from December 31, 2023 and variance of the assets are described as follows:

- Total current assets increased by Baht 21,058 million mainly due to the increase in cash and cash equivalents, and current financial assets by Baht 6,033 million (refer to cash flows analysis). However, there was a decrease in account receivables by Baht 1,266 million due to a slowdown in demand of petroleum products following the winter season. Inventories increased by Baht 6,045 million due to lower sales volumes in petroleum products. Other account receivables increased by Baht 8,520 million due to Financial derivative assets classified to short-term based on contract maturity not exceeding 12 months.
- Property, plant and equipment increased by Baht 80 million mainly due to depreciation by Baht 6,385 million, while the assets increased by Baht 6,467 million due to the completion projects.
- Non-current assets increased by Baht 4,905 million from the fair value measurements on the investment in Global Power Synergy Public Company Limited (GPSC).

Liabilities

As of March 31, 2024, the Company had total liabilities of Baht 443,796 million, increased by Baht 20,972 million from December 31, 2023 and movements of liabilities were as follows:

- Interest-bearing debt (including Lease liabilities) increased by Baht 8,131 million due to 1) the drawdown of long-term borrowings by Baht 310 million, Euro 8 million and USD 100 million 2) the repayment of long-term loans by Baht 2,170 million. Also, the depreciation of the Thai Baht has led to an increase in the valuation of foreign currency-denominated debts.
- Trade accounts payable increased by Baht 4,453 million mainly due to higher trade accounts payable of Olefins after the completion of planned maintenance shutdown of Olefins in Q4/2023.
- Other liabilities increased by Baht 7,383 million due to due to financial derivative liabilities classified to short-term based on contract maturity not exceeding 12 months.
- Other payable increased by Baht 1,005 million mainly due to deferred tax liabilities increased by Baht 836 million.

Shareholder's Equity

As of March 31, 2024, the Company had total shareholder's equity of Baht 301,252 million, which increased by Baht 5,071 million from December 31, 2023 as a result from change in Other components of equity, which included the loss from fair value measurements in financial assets and the fair value measurements of GPSC.

Deleveraging Plan

The Company has a deleveraging plan in place to maintain its Investment Grade credit rating. Through its subsidiary, GC Treasury Center Company Limited (GCTC), the Company conducted a tender offer to repurchase bonds during the period from April 16 to April 23, 2024. GCTC completed the repurchase and cancellation of the bonds on April 29, 2024 by USD 749,224,000 are described as follows:

(Unit: US Dollar)	The 2032 Debentures	The 2051 Debentures	The 2052 Debentures	Total
1.Previously outstanding principal amount	800,000,000	525,163,000	240,000,000	1,565,163,000
2.Deduct tendered amount	461,372,000	150,832,000	137,020,000	749,224,000
3.Outstanding principal amount*	338,628,000	374,331,000	102,980,000	815,939,000

The mentioned repurchase was completed during the high market interest rates (U.S. Treasury Bond Yield) environment, which is an opportunity for the Company to repurchase U.S. dollar-denominated bonds as the price of the bonds are lower than Book Value and Issuance Price. The Company paid amount of Baht 644 million for the Tender Offer, which the value of the difference to the outstanding value of the bonds will result to a gain from the repurchase of USD bonds in Q2/2024.

4.2 Cashflow statement

Cashflow (Unit: Million Baht)	For three months Ended 31 March 2024
Net cash flows provided by operating activities	11,052
Net cash flows used in investing activities	(7,103)
Net cash flows provided by financing activities	(2,935)
Net increase (decrease) in cash and cash equivalents, before effect from foreign exchange rate	1,013
Effects of exchange rates on cash and cash equivalents	1,467
Net decrease in cash and cash equivalents during the period	2,480
Cash and cash equivalents at the beginning of the period	37,319
Cash and cash equivalents at the end of the period	39,799
Current investments in financial assets at the end of the period	12,483
Net cash and cash equivalent and investment at the end of the period	52,282

For the period ended March 31, 2024, the Company had cash flow activities as follows:

- Cash flows received from operating activities of Baht 11,052 million due to operating activities and decrease in working capital.
- Cash flow used in investing activities of Baht 7,103 million. The Company had cash paid for property, plant, and equipment, and intangible assets amounting to Baht 4,481 million. Additionally, the Company had cash paid for an increase of investment in debt instruments to Baht 3,161 million. The Company had cash received from Interest received of Baht 476 million.
- Cash flow provided by financing activities of Baht 2,935 million mainly due to the repayment of short-term of Baht 2,555 million, finance costs paid of Baht 3,733 million, and payment of lease liabilities of Baht 848 million. Meanwhile, the Company had cash received from borrowings from financial institutions of Baht 4,284 million.

As a result, as of March 31, 2024, the Company had total cash and cash Equivalents of Baht 39,799 million, along with current investments in financial assets of Baht 12,483 million. Hence, the Company had total cash and cash equivalent and investment of Baht 52,282 million. The Company had Net interest-bearing debt to equity at 0.82 times and Net interest-bearing debt to EBITDA at 5.75 times.

4.3 Key Financial Ratios

Financial Ratios	Q1/2023	Q4/2023	Q1/2024
Current Ratio (Times)	1.65	1.48	1.50
EBITDA to Sales Revenue (%)	3.50%	6.56%	6.85%
Net Profits to Sales Revenues (%)	-1.73%	0.16%	0.05%
Return on Total Assets (%)	-0.33%	1.94%	1.91%
Return on Equity (%)	-3.72%	0.34%	0.11%
Interest Bearing Debt to Equity (Times)	0.99	0.98	0.99
Net Interest Bearing Debt to Equity (Times)	0.87	0.82	0.82
Interest Bearing Debt to EBITDA (Times)	13.02	7.17	6.97
Net Interest Bearing Debt to EBITDA (Times)	11.44	6.03	5.75

Remarks:

Current Ratio	=	Current Assets divided by Current Liabilities
EBITDA to Sales Revenue	=	EBITDA divided by Sales Revenue
Net Profit to Sales Revenue	=	Profits attributable to Owners of the Company to Sales Revenue
Return on Total Assets	=	Earnings before Interest and Tax divided by Average Total Assets
Return on Equity	=	Profits attributable to Owners of the Company divided by Average Equity attributable to Owners of the Company
Interest Bearing Debt to Equity	=	Interest Bearing Debt divided by Shareholder's Equity
Net Interest Bearing Debt to Equity	=	Interest Bearing Debt net Cash and Cash Equivalent and Current Investments in financial assets divided by Shareholder's Equity
Interest Bearing Debt to EBITA	=	Interest Bearing Debt net Cash and Cash Equivalent and Current Investments in financial assets divided by EBITDA
Net Interest Bearing Debt to EBITDA	=	Interest Bearing Debt net Cash and Cash Equivalent and Current Investments in financial assets divided by EBITDA

5. Projects Progress

Estimated Annual CAPEX of PTTGC Group for the next 5 years

CAPEX of PTTGC group	Total	Estimated Annual CAPEX (M.USD)				
	2024-2028	2024	2025	2026	2027	2028
1) PTTGC group excluding allnex	192	151	37	3	1	-
2) allnex expansion & growth Capex	622	117	157	135	109	103
total	814	268	194	138	110	103

Notes: 1. Group annual maintenance ~ 400 M.USD (including allnex Holding GmbH)

2. Other projects such as IT & digital, new office facility, operational excellence etc.

3. allnex expansion & growth Capex based on capex plan, including committed and uncommitted projects

4. FX assumption for USD/EURO is 1.10 for allnex CAPEX plan.

6. Market and Business Outlook in 2024

Global economic growth in 2024 remains challenging, even though there have been recovery from the COVID-19 crisis, conflicts in Ukraine, Middle East, and energy crises. The global growth outlook continues to be weak both in the overall sentiment and on a country-by-country basis. This is attributable to the impact of interest rates hike that have persisted to the highest level in the past decade in key global economies, as well as economic challenges. Furthermore, geopolitical tensions remain a significant risk factor, including the ongoing conflicts in Russia and Ukraine, and the Israel-Hamas war. It is expected that global growth will slow down from 3.5% in 2023 to 3.2% in 2024 and 3.2% in 2025, according to the International Monetary Fund (IMF, April 2024). Nevertheless, the economic situation is expected to gradually improve in the latter half of the year after international economic stimulus measures, leading to a slowly improving overall economic outlook.

Upstream business unit

The Company anticipates that the trend of Dubai crude oil prices in 2024 will average between 82-87 USD/barrel. However, there are several factors contributing to the challenge in crude oil market. These factors include ongoing inflationary pressures, persistently high-interest rates from previous years, and uncertainties related to the economic recovery in China, which can dampen oil demand. In terms of supply, OPEC and its allies (OPEC plus), expect a continuous control over production levels to maintain market stability. On the other hand, the supply shortage can be supported by increased production from non-OPEC countries, such as the United States, Brazil, Iran, and Venezuela.

For petroleum products, the Company anticipates that the price and products spread in 2024 will be softened compared to 2023. This is due to economic pressure factors, high-interest rate policy effects, and uncertainties in the global economy. Additionally, changes in consumer behavior and market uncertainties contribute to the expected weakening of demand. As a result, Diesel (10 ppm) over Dubai spread is expected to be 18-22 USD/barrel, while Low Sulfur Fuel Oil (LSFO) over Dubai spread will be in the range of 9-13 USD/barrel. The expected Gasoline over Dubai spread is around 14-18 USD/barrel. The Company continues to manage its production and sales strategies to align with the evolving market conditions. This includes optimizing by closely monitoring the market situation for crude oil supply and product spread. The Company expects that the Refinery's utilization rate to be at 101% in 2024.

For Aromatics products, the Company anticipates that the product spread for paraxylene and naphtha in 2024 will decrease to a range of 360-380 USD/ton, down from 2023. Economic challenges in the global economy and changing consumer behavior contribute to the expected decrease. The spreads for benzene and naphtha are expected to be around 320-340 USD/ton, which increase from 2023 due to the lower inventory level of benzene and the supply shortage in Q1/2024. The production capacity utilization rate for the Aromatics is expected to be at 94% in 2024.

The outlook for Olefins products, the Company anticipates that Ethylene products price will be at 950-980 USD/ton and Propylene price is expected to be 890-920 USD/ton. Both are expected to increase from 2023. Economic conditions are expected to slowly improve in the second half of 2024, which can support the overall market for ethylene and propylene. The Company expects Olefins utilization rate to be around 92% in 2024.

Intermediates business unit

For Phenol market trend in 2024, the Company expects that Phenol P2F spread will be in the range of 210-230 USD/ton. This reflects a decrease from 2023 and is impacted by ongoing economic challenges in the first half of the year, with a gradual improvement expected in the latter half of 2024. The economic stimulus package in

China is anticipated to support this improvement. However, the continuous growth of new capacities entered in China will exert pressure on Phenol products.

Regarding MEG (Monoethylene Glycol) market trends, the Company expects the price of MEG to be around 530-550 USD/ton with an upward trend. There is an expectation of a gradual recovery in the second half of 2024 as economic pressures will start to ease. This will support the demand for MEG products. For PTA (Purified Terephthalic Acid) products, the Company anticipates that the product spread for PTA will gradually improve in 2024 as various economic activities worldwide, including trading and tourism, return to more normal levels.

Polymers & Chemicals Business unit

The Company anticipates that the average Polyethylene price in 2024 is expected to be 1,050-1,080 USD/ton, with a slight increase from 2024. The demand for plastic resins is expected to be supported by economic stimulus package and recovery measures implemented by countries worldwide. However, there are factors that may exert pressure, such as economic setbacks and global central bank policies to manage inflation rates. Additionally, there is still some uncertainty related to geopolitical factors in the European and Middle East region. In terms of suppliers, the Company anticipates that there will be additional capacities coming from countries such as China, India, and the United States. The Company expects the Polyethylene plants utilization rate to be around 104% in 2024.

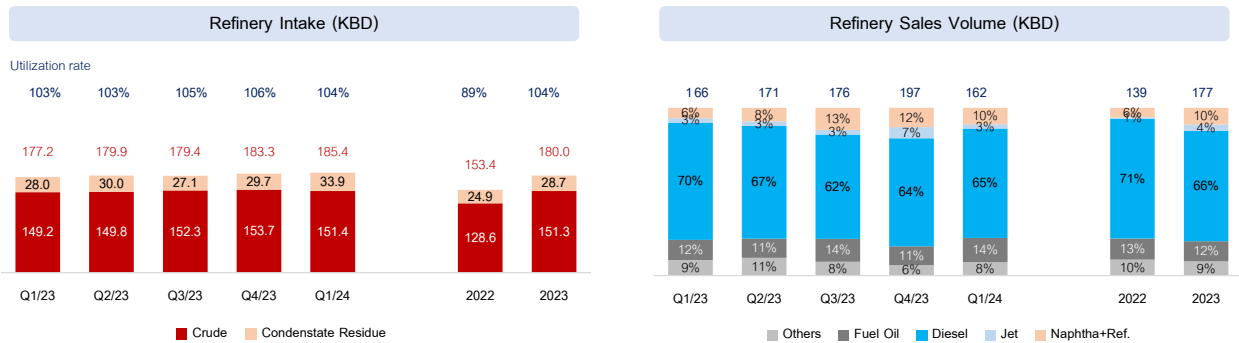
Performance Chemicals Business unit

The economic slowdown is expected to continue to have an impact on the demand for industrial Coating Resin products. However, it is anticipated that the growth in demand for products in this business unit will outpace the overall GDP growth. This is due to several factors that underscore the importance of quality control and surface protection in various industries that utilize coating resins, such as automotive.

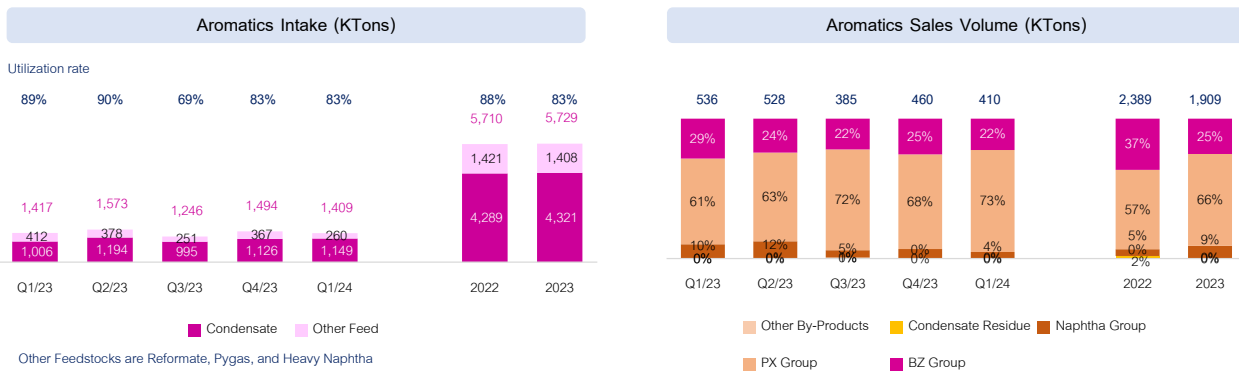
7. Appendix

7.1 Production and Sales

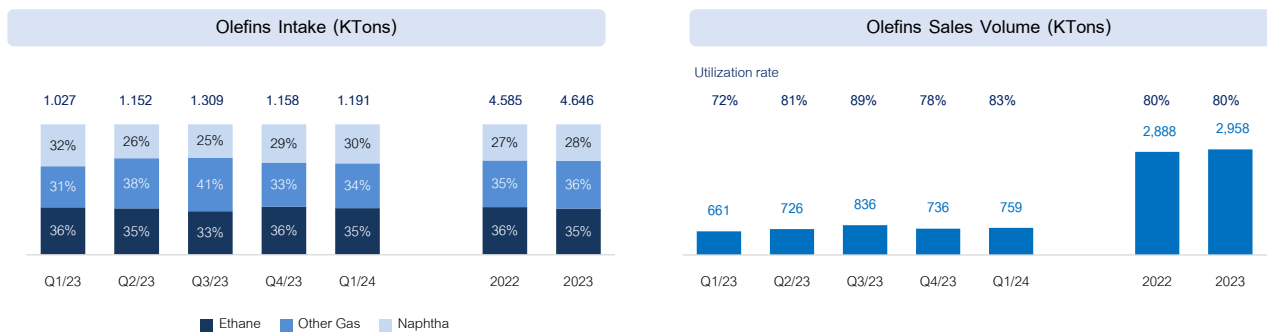
Graph 1: Refinery Intake and Sales Volume



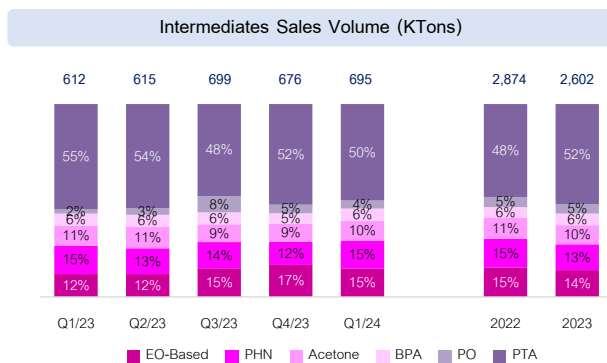
Graph 2: Aromatics Intake and Sales Volume (BTX)



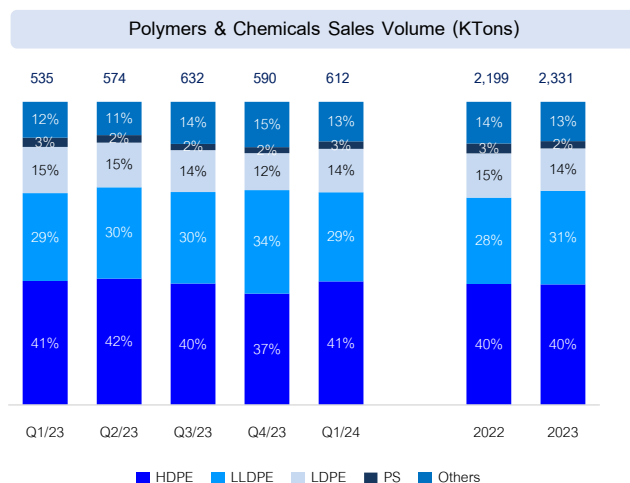
Graph 3: Olefins Intake and Olefins and Derivatives Sales Volume



Graph 4: Intermediates products sales Volume



Graph 5: Polymers & Chemicals products sales Volume



Graph 6: Utilization rate

Utilization rate	Q1/23	Q2/23	Q3/23	Q4/23	Q1/24	2022	2023
Upstream							
- Refinery	103%	103%	105%	106%	104%	89%	104%
- Aromatics	89%	90%	69%	83%	83%	88%	83%
- Olefins	72%	81%	89%	78%	83%	80%	80%
Intermediates							
- MEG	13%	4%	90%	78%	46%	79%	47%
- Phenol	104%	98%	102%	91%	108%	115%	99%
- BPA	98%	103%	103%	95%	118%	102%	100%
- PO	26%	46%	106%	61%	50%	69%	60%
Polymers & Chemicals							
HDPE	106%	110%	110%	97%	115%	100%	106%
LLDPE	93%	93%	105%	98%	103%	89%	97%
LDPE	96%	119%	115%	93%	111%	115%	106%
Total PE	99%	104%	109%	97%	109%	98%	102%

7.2 Detail of Adjusted EBITDA by Business Unit

Adjusted EBITDA ¹ Margin by Business Unit	Q1/2023	Q4/2023	Q1/2024	YoY % +/-	QoQ % +/-
Adjusted EBITDA (Million Baht)					
Upstream	6,632	6,547	9,047	36%	38%
Refinery	4,900	4,759	4,329	-12%	-9%
Aromatics	2,440	1,697	2,713	11%	60%
Olefins	(708)	92	2,005	>200%	>200%
Intermediates	(978)	192	207	121%	8%
Polymers & Chemicals	1,704	1,181	279	-84%	-76%
Bio & Circularity	269	185	92	-66%	-50%
Performance Chemicals	1,660	1,783	1,865	12%	5%
Service and Others	243	1,447	(437)	<-200%	-130%
Total	9,530	11,335	11,054	16%	-2%
Adjusted EBITDA margin (%)					
Upstream	8	7	11	3	4
Intermediates	(6)	1	1	7	0
Polymers & Chemicals	8	5	1	(7)	(4)
Bio & Circularity	7	5	2	(5)	(3)
Performance Chemicals	7	8	8	1	(0)
Average	6	7	7	1	0

Note: 1 Adjusted EBITDA refers to EBITDA excluding Stock gain/(loss), NRV, Gain/(loss) from commodity hedging, and Extra item

7.3 Planned Maintenance Shutdown Schedule 2024

Plant		2024											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
OLE	Cracker		56		OLE2/2								
	Oleflex												
POL	HDPE										15	HDPE2	
	LDPE								24				
	LLDPE I				34								
	LLDPE II												
	PS										33		
EOB	TOCGC		53										
	EA		55										
PHN	Phenol I												
	Phenol II												
	BPA					30							
REF	Refinery												
ARO1	Aromatics I												
ARO2	Aromatics II												
GCO	PO												